

Draft

PERMIT

Permit No: 200901294-MG

Municipality: Town of Groton

Work Area: Poquonock River and Bakers Cove off property located at the Groton-New London Airport located at 115 Tower Avenue

Permittee: Connecticut Department of Transportation
2800 Berlin Turnpike
P.O. Box 317546
Newington, CT 06131-7546

Pursuant to sections 22a-28 through 22a-35 and 22a-359 through 22a-363f of the Connecticut General Statutes ("CGS") and in accordance with CGS section 22a-98, and section 401 of the Federal Clean Water Act, as amended, and the Connecticut Water Quality Standards dated December 2002, a permit is hereby granted by the Commissioner of Environmental Protection ("Commissioner") to construct runway safety areas for aviation safety as is more specifically described below in the SCOPE OF AUTHORIZATION, in the Poquonock River and Bakers Cove off property identified as the "work area" above.

*******NOTICE TO PERMITTEES AND CONTRACTORS*******

UPON INITIATION OF ANY WORK AUTHORIZED HEREIN, THE PERMITTEE ACCEPTS AND AGREES TO COMPLY WITH ALL TERMS AND CONDITIONS OF THIS PERMIT. FAILURE TO CONFORM TO THE TERMS AND CONDITIONS OF THIS PERMIT MAY SUBJECT THE PERMITTEE AND ANY CONTRACTOR TO ENFORCEMENT ACTIONS, INCLUDING INJUNCTIONS AS PROVIDED BY LAW AND PENALTIES UP TO \$1,000.00 PER DAY PURSUANT TO THE ADMINISTRATIVE CIVIL PENALTY POLICY DESCRIBED IN SECTIONS 22a-6b-1 THROUGH 22a-6b-15 OF THE REGULATIONS OF CONNECTICUT STATE AGENCIES.

SCOPE OF AUTHORIZATION

The Permittee is hereby authorized to conduct the following work as described in application #200901294-MG including fifteen (15) sheets of plans, Figure 1 undated, Figures 2, 5 and 6 dated February 6, 2009, Figures 3 and 7 dated January 26, 2009, Figures 4, 8 and 9 dated January 21, 2009, Figures 10 and 13 dated February 4, 2009, Figures 11 and 12 dated March 16, 2009, Figure 14 dated March 13, 2009 and Figure 15 dated April 17, 2009, submitted by the Permittee to the Commissioner and attached hereto as follows:

conduct improvements to the existing Runway Safety Area (RAS) at Runway 5 as shown on the plans attached hereto by:

1. installing a sandbag cofferdam around the project area;

2. using land-based equipment, excavate organic material and stockpile on the upland;
3. placing fill material including subbase and pavement courses, earthen material and crushed stone;
4. installing a 180' wide by 390' long Engineered Material Arresting System, (EMAS);
5. regrading the area around Runway 5 using the excavated material identified above;
6. removing existing invasive plant species from the areas shown on the plans attached hereto;
7. removing existing sediment, creating salt panes and excavating channels associated with wetland creation as shown on Figures 11-14 of 15.

UPON INITIATION OF ANY WORK AUTHORIZED HEREIN, THE PERMITTEE ACCEPTS AND AGREES TO COMPLY WITH ALL TERMS AND CONDITIONS OF THIS PERMIT.

SPECIAL TERMS AND CONDITIONS

1. Except as specifically authorized by this permit, no equipment or material including but not limited to, fill, construction materials, excavated material or debris, shall be deposited, placed or stored in any wetland or watercourse on or off-site, nor shall any wetland or watercourse be used as a staging area or accessway other than as provided herein.
2. At no time shall heavy equipment, including but not limited to excavators, front-end loaders, trucks, backhoes, tractors and other non-low pressure equipment be staged waterward of the high tide line or in tidal wetlands.
3. Prior to the commencement of the work authorized herein, the Permittee shall install sedimentation and erosion control measures around the construction area. The Permittee shall maintain such sedimentation and erosion control measures in optimal operating condition until the work authorized herein has been completed and the area has stabilized.
4. The Permittee shall for a minimum of four (4) years following completion of the mitigation/restoration work described in the SCOPE OF AUTHORIZATION paragraph 7., above, conduct the following maintenance procedures: 1) if applicable, remove all invasive plant species within six (6) meters of the mitigation planting areas; 2) remove any construction debris such as garbage or excessive decayed plant material from the mitigation area; 3) replace dead or missing plants which have not already been compensated for by a suitable volunteer species; 4) repair or establish of erosion control measures. The Permittee shall submit to the Commissioner no later than December 15th of any year documentation that indicates that such work has been completed.
5. The Permittee shall provide to the Commissioner for a period of five (5) years, beginning the first growing season following completion of the work authorized herein, a report on the results of the Yellow Thistle walkover surveys.

6. All excavated sediment shall be stockpiled on the upland and contained using appropriate sedimentation and erosion controls designed in accordance with the 2002 Connecticut Erosion and Sediment Control Guidelines and shall continue to maintain such controls in good operating condition for the construction period of the project or until the site is stabilized.
7. All waste material generated by the work authorized herein shall be disposed of at an approved upland location landward of the high tide line and outside of any tidal wetland vegetation.
8. In undertaking the work authorized herein, the Permittee shall not cause or allow pollution of tidal wetlands or watercourses, including pollution resulting from sedimentation and erosion. For purposes of this permit, "pollution" means "pollution" as that term is defined by section 22a-423 of the General Statutes.
9. Not later than two (2) weeks prior to the commencement of any work authorized herein, the Permittee shall submit to the Commissioner, on the form attached hereto as Appendix A, the name(s) and address (es) of any contractor(s) employed to conduct such work and the expected date for commencement and completion of such work.
10. On or before (a) ninety (90) days after completion of the work authorized herein, or (b) upon expiration of the work completion date or any authorized one-year extension thereof, whichever is earlier, the Permittee shall submit to the Commissioner "as-built" plans prepared and sealed by a licensed engineer, licensed surveyor or licensed architect, as applicable, of the work area showing all contours, bathymetries, tidal datums and structures.

GENERAL TERMS AND CONDITIONS

1. All work authorized by this permit shall be completed within five (5) years from date of issuance of this permit ("work completion date") in accordance with all conditions of this permit and any other applicable law.
 - a. The Permittee may request a one-year extension of the work completion date. Such request shall be in writing and shall be submitted to the Commissioner at least thirty (30) days prior to said work completion date. Such request shall describe the work done to date, work which still needs to be completed and the reason for such extension. The Commissioner shall grant or deny such request in her sole discretion.
 - b. Any work authorized herein conducted after said work completion date or any authorized one year extension thereof is a violation of this permit and may subject the Permittee to enforcement action, including penalties, as provided by law.
2. In conducting the work authorized herein, the Permittee shall not deviate from the attached plans, as may be modified by this permit. The Permittee shall not make de minimis changes from said plans without prior written approval of the Commissioner.
3. The Permittee shall maintain all structures or other work authorized herein in good condition. Any such maintenance shall be conducted in accordance with applicable law including, but not limited to, sections 22a-28 through 22a-35 and sections 22a-359 through 22a-363f of the General Statutes.

4. Prior to the commencement of any work authorized hereunder, the Permittee shall cause a copy of this permit to be given to any contractor(s) employed to conduct such work. At the work area the Permittee shall, whenever work is being performed, make available for inspection a copy of this permit and the final plans for the work authorized herein.
5. The Permittee shall notify the Commissioner in writing of the commencement of any work and completion of all work authorized herein no later than three (3) days prior to the commencement of such work and no later than seven (7) days after the completion of such work.
6. Upon completion of any work authorized herein, the Permittee shall restore all areas impacted by construction, or used as a staging area or accessway in connection with such work, to their condition prior to the commencement of such work.
7. Any document required to be submitted to the Commissioner under this permit or any contact required to be made with the Commissioner shall, unless otherwise specified in writing by the Commissioner, be directed to:

Permit Section
Office of Long Island Sound Programs
Department of Environmental Protection
79 Elm Street
Hartford, Connecticut 06106-5127
(860) 424-3034
Fax # (860) 424-4054

8. The date of submission to the Commissioner of any document required by this permit shall be the date such document is received by the Commissioner. The date of any notice by the Commissioner under this permit, including but not limited to notice of approval or disapproval of any document or other action, shall be the date such notice is personally delivered or the date three (3) days after it is mailed by the Commissioner, whichever is earlier. Except as otherwise specified in this permit, the word "day" as used in this permit means calendar day. Any document or action which is required by this permit to be submitted or performed by a date which falls on a Saturday, Sunday or a Connecticut or federal holiday shall be submitted or performed on or before the next day which is not a Saturday, Sunday, or a Connecticut or federal holiday.
9. The work specified in the SCOPE OF AUTHORIZATION is authorized solely for the purpose set out in this permit. No change in the purpose or use of the authorized work or facilities as set forth in this permit may occur without the prior written authorization of the Commissioner. The Permittee shall, prior to undertaking or allowing any change in use or purpose from that which is authorized by this permit, request authorization from the Commissioner for such change. Said request shall be in writing and shall describe the proposed change and the reason for the change.
10. This permit may be revoked, suspended, or modified in accordance with applicable law.

11. This permit is not transferable without prior written authorization of the Commissioner. A request to transfer a permit shall be submitted in writing and shall describe the proposed transfer and the reason for such transfer. The Permittee's obligations under this permit shall not be affected by the passage of title to the work area to any other person or municipality until such time as a transfer is authorized by the Commissioner.
12. The Permittee shall allow any representative of the Commissioner to inspect the work authorized herein at reasonable times to ensure that it is being or has been accomplished in accordance with the terms and conditions of this permit.
13. In granting this permit, the Commissioner has relied on representations of the Permittee, including information and data provided in support of the Permittee's application. Neither the Permittee's representations nor the issuance of this permit shall constitute an assurance by the Commissioner as to the structural integrity, the engineering feasibility or the efficacy of such design.
14. In the event that the Permittee becomes aware that they did not or may not comply, or did not or may not comply on time, with any provision of this permit or of any document required hereunder, the Permittee shall immediately notify the Commissioner and shall take all reasonable steps to ensure that any noncompliance or delay is avoided or, if unavoidable, is minimized to the greatest extent possible. In so notifying the Commissioner, the Permittee shall state in writing the reasons for the noncompliance or delay and propose, for the review and written approval of the Commissioner, dates by which compliance will be achieved, and the Permittee shall comply with any dates which may be approved in writing by the Commissioner. Notification by the Permittee shall not excuse noncompliance or delay and the Commissioner's approval of any compliance dates proposed shall not excuse noncompliance or delay unless specifically stated by the Commissioner in writing.
15. In evaluating the application for this permit the Commissioner has relied on information and data provided by the Permittee and on the Permittee's representations concerning site conditions, design specifications and the proposed work authorized herein, including but not limited to representations concerning the commercial, public or private nature of the work or structures authorized herein, the water-dependency of said work or structures, its availability for access by the general public, and the ownership of regulated structures or filled areas. If such information proves to be false, deceptive, incomplete or inaccurate, this permit may be modified, suspended or revoked, and any unauthorized activities may be subject to enforcement action.
16. The Permittee may not conduct work waterward of the high tide line or in tidal wetlands at this permit site other than the work authorized herein, unless otherwise authorized by the Commissioner pursuant to CGS section 22a-359 et. seq. and/or CGS section 22a-32 et. seq.
17. The issuance of this permit does not relieve the Permittee of their obligations to obtain any other approvals required by applicable federal, state and local law.
18. Any document, including but not limited to any notice, which is required to be submitted to the Commissioner under this permit shall be signed by the Permittee and by the individual or individuals responsible for actually preparing such document, each of whom shall certify in writing as follows: "I have personally examined and am familiar with the information submitted in this document and all

attachments and certify that based on reasonable investigation, including my inquiry of those individuals responsible for obtaining the information, the submitted information is true, accurate and complete to the best of my knowledge and belief, and I understand that any false statement made in this document or its attachments may be punishable as a criminal offense.”

19. This permit is subject to and does not derogate any present or future property rights or powers of the State of Connecticut, and conveys no property rights in real estate or material nor any exclusive privileges, and is further subject to any and all public and private rights and to any federal, state or local laws or regulations pertinent to the property or activity affected hereby.

Issued on _____, 2009

STATE OF CONNECTICUT
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Amey W. Marrella
Commissioner

Permit #200901294-MG, Groton
CT DOT

OFFICE OF LONG ISLAND SOUND PROGRAMS

APPENDIX A

TO: Permit Section
Department of Environmental Protection
Office of Long Island Sound Programs
79 Elm Street
Hartford, CT 06106-5127

PERMITTEE: Connecticut Department of Transportation
2800 Berlin Turnpike
P.O. Box 317546
Newington, CT 06131-7546

Permit No: #200901294-MG, Groton

CONTRACTOR 1: _____

Address: _____

Telephone #: _____

CONTRACTOR 2: _____

Address: _____

Telephone #: _____

CONTRACTOR 3: _____

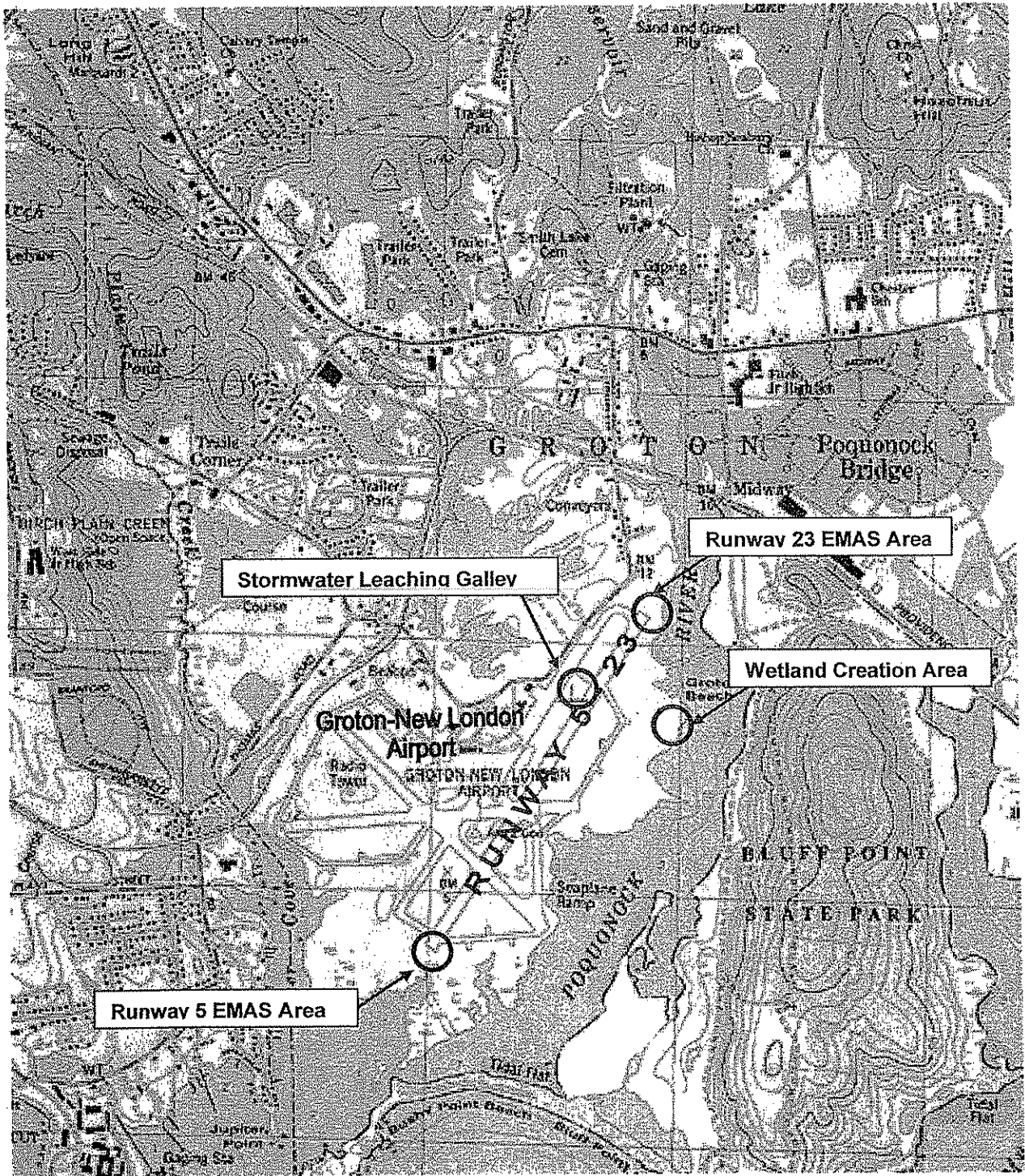
Address: _____

Telephone #: _____

EXPECTED DATE OF COMMENCEMENT OF WORK: _____

EXPECTED DATE OF COMPLETION OF WORK: _____

PERMITTEE: _____
(signature) (date)



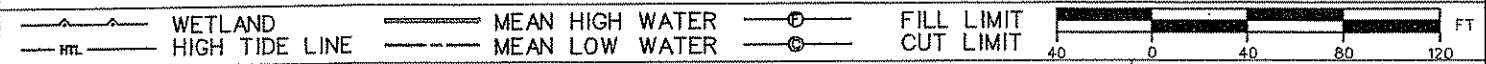
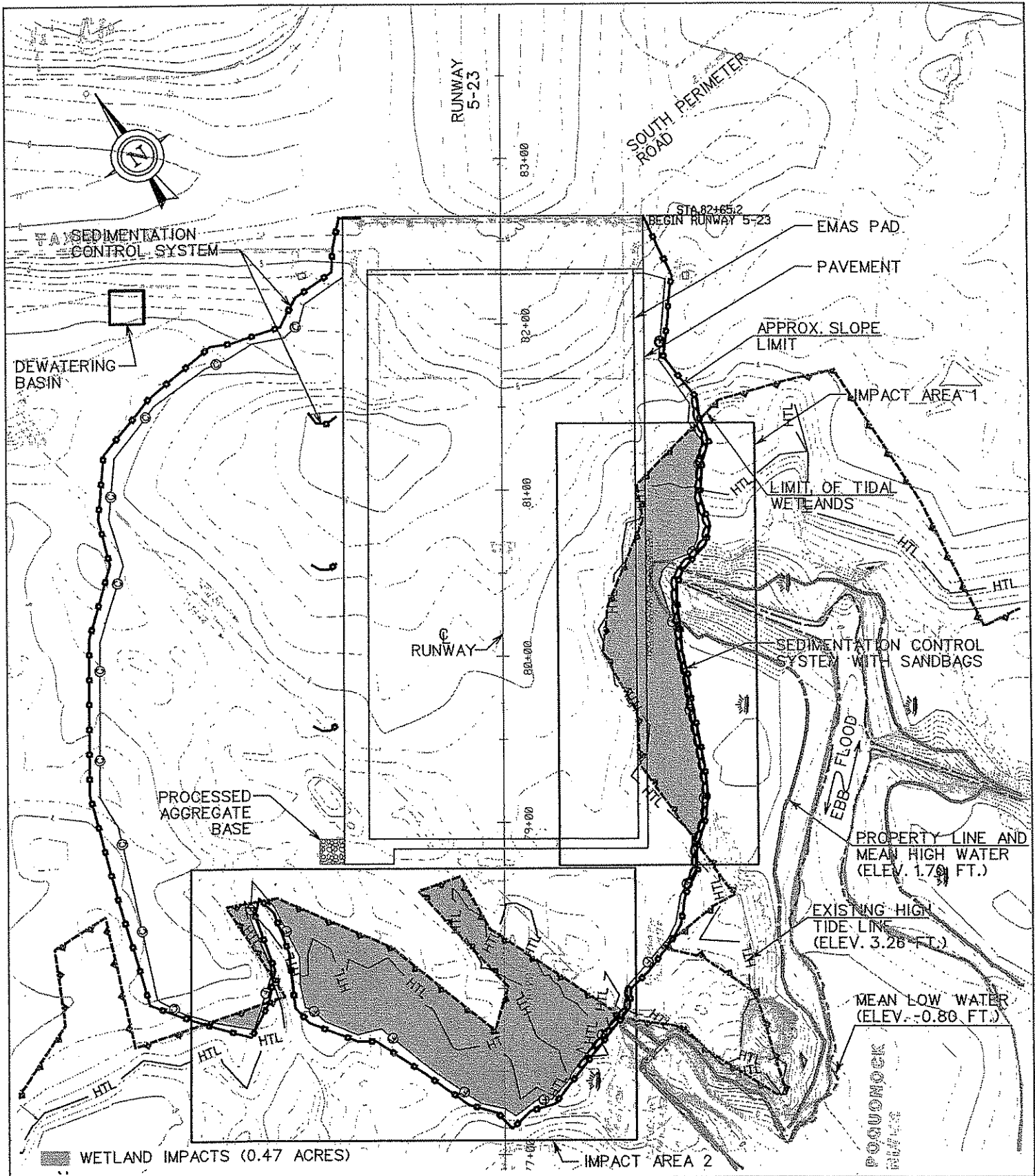
Source: USGS Topographic Map Printed from TOPO
1998 Wildflower Productions


Produced for the
**Connecticut Department of
Transportation**
By **PARSONS**

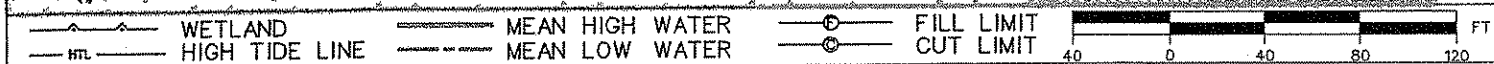
N
Scale
1" = 2,000'
(1:24,000)

**Groton-New London Airport Safety
Improvements Runway 5-23**

Figure 1: Project Location



<p>PREPARED FOR:</p>  <p>CONNECTICUT DEPARTMENT OF TRANSPORTATION</p> <p>PREPARED BY:</p> <p>PARSONS</p>	<p>Connecticut Department of Transportation GROTON - NEW LONDON AIRPORT PROJECT 58 - 303</p> <h2 style="text-align: center;">RUNWAY 5 - 23 SAFETY IMPROVEMENTS</h2>	<p>FIGURE 2:</p> <p>PLAN VIEW RUNWAY 5</p> <p>DATE: 2/06/09</p>
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PREPARED BY: **PARSONS**

RUNWAY 5 - 23 SAFETY IMPROVEMENTS

DATE: 1/26/09

VEGETATION SKETCH LEGEND



UPLAND/LAWN (ANDROPOGON V., TARAXACUM O., PLANTAGO M.)



UPLAND/SHRUB (ROSA RUGOSA)



PHRAGMITES AUSTRALIS



JUNCUS GERARDII



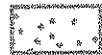
SPARTINA PATENS



SPARTINA ALTERNIFLORA



IVA F. / BACCHARIS H. / MYRICA P.



BRACKISH LAWN (ANDROPOGON V., JUNCUS G., LIMONUM N., PLANTAGO M.)



MUD FLAT



OPEN WATER



DISTURBED



EXISTING PAVEMENT AREA

PREPARED FOR:



CONNECTICUT
DEPARTMENT OF
TRANSPORTATION

PREPARED BY:

PARSONS

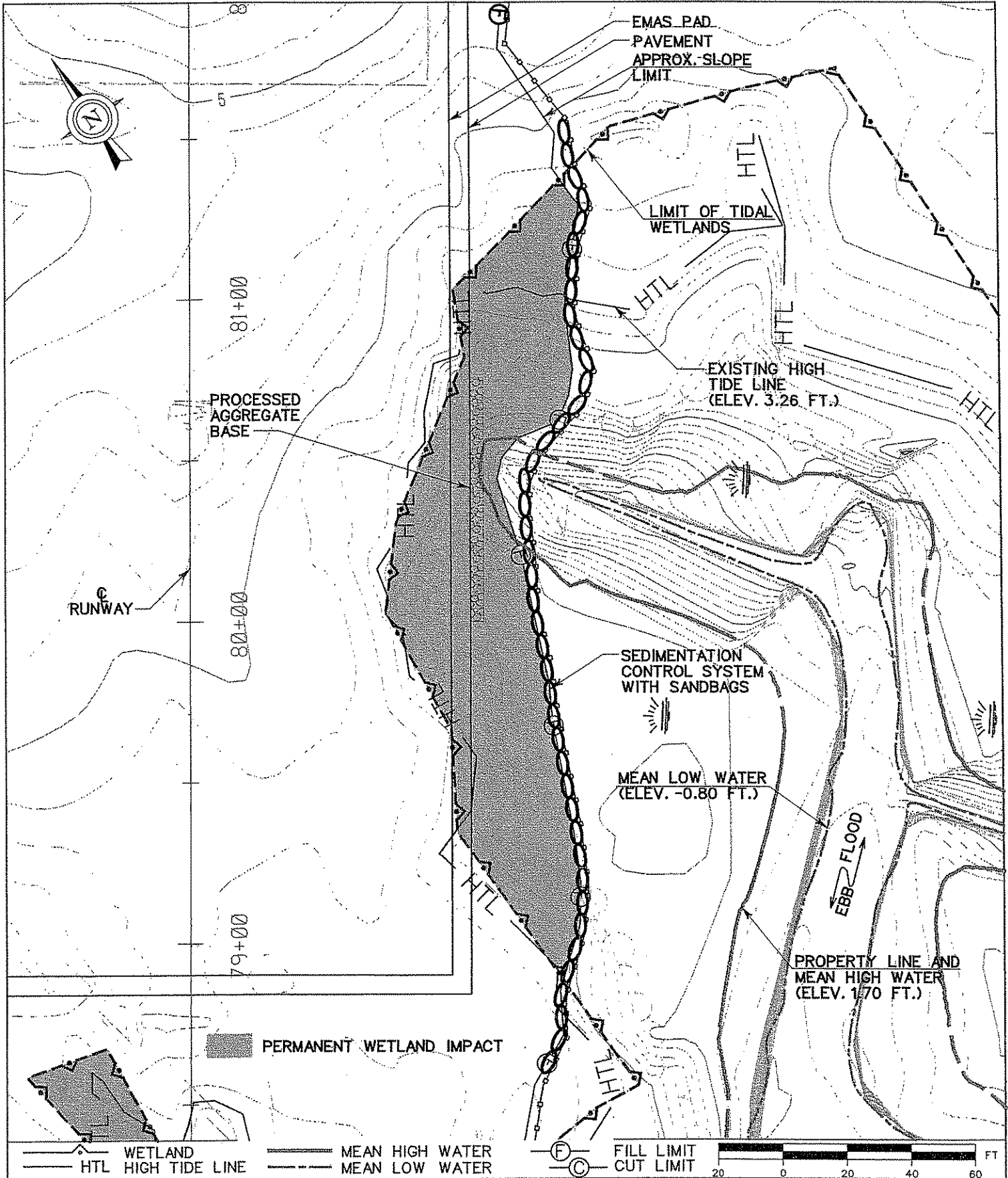
Connecticut Department of Transportation
GROTON - NEW LONDON AIRPORT
PROJECT 58 - 303


**RUNWAY 5 - 23
SAFETY IMPROVEMENTS**

FIGURE 4:

VEGETATION SKETCH
KEY
RUNWAY 5

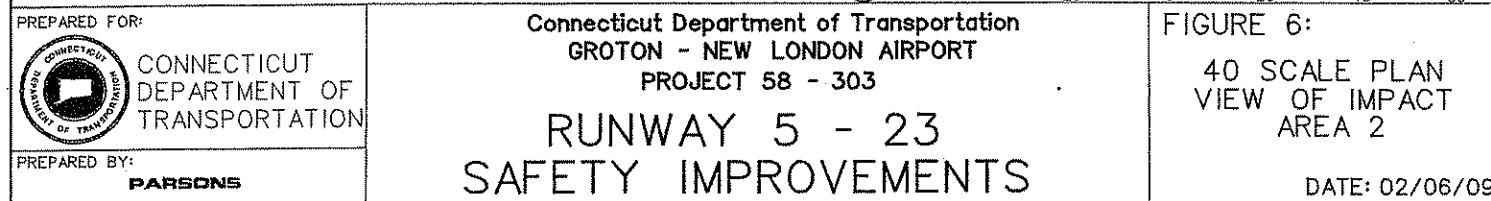
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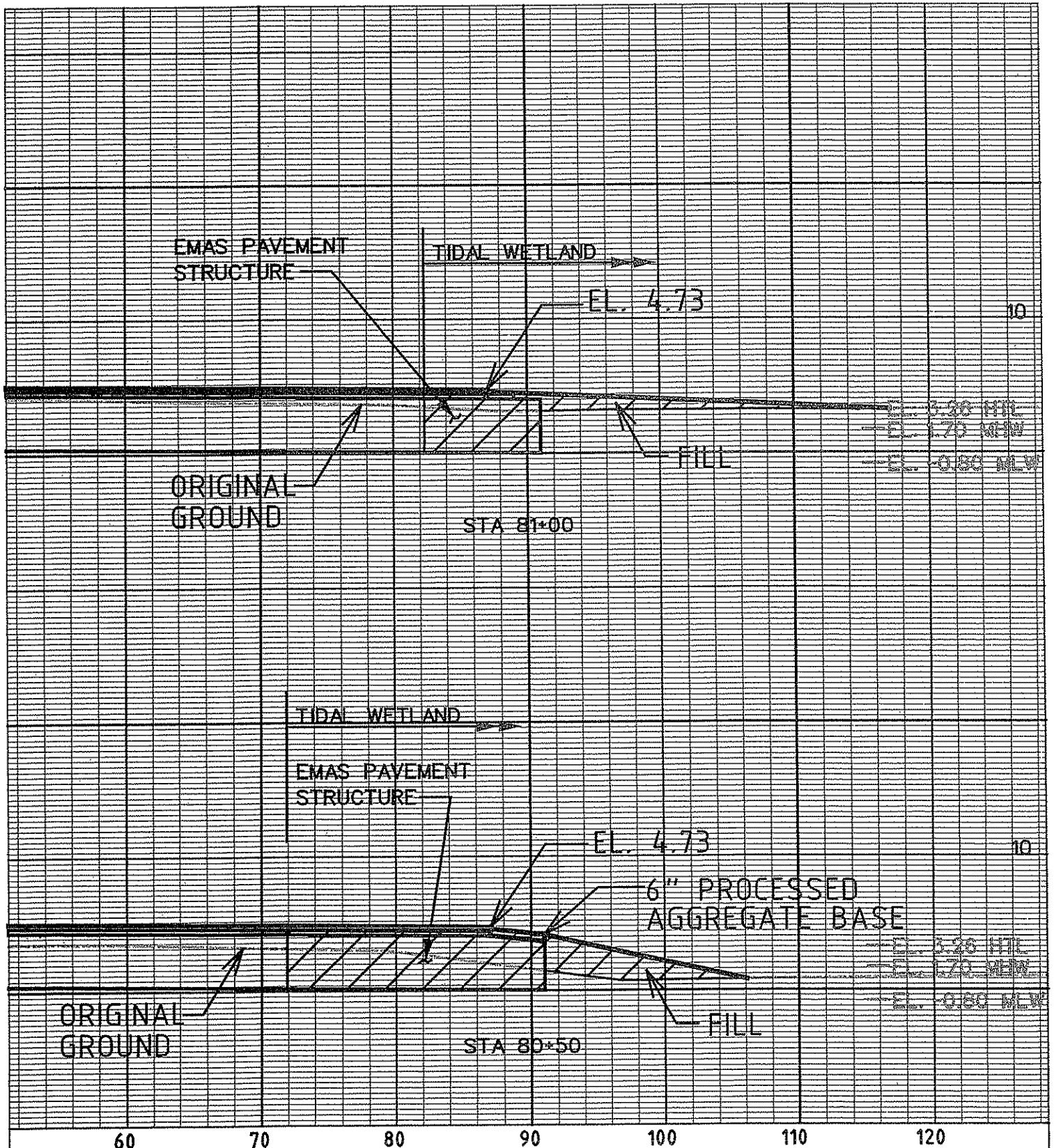


PREPARED FOR:

 CONNECTICUT
 DEPARTMENT OF
 TRANSPORTATION
 PREPARED BY:
PARSONS

Connecticut Department of Transportation
 GROTON - NEW LONDON AIRPORT
 PROJECT 58 - 303
RUNWAY 5 - 23
SAFETY IMPROVEMENTS

FIGURE 5:
 40 SCALE PLAN
 VIEW OF IMPACT
 AREA 1
 DATE: 2/06/09





FILL IN TIDAL WETLAND

SCALE 1" = 10'

PREPARED FOR:



CONNECTICUT
DEPARTMENT OF
TRANSPORTATION

PREPARED BY:

PARSONS

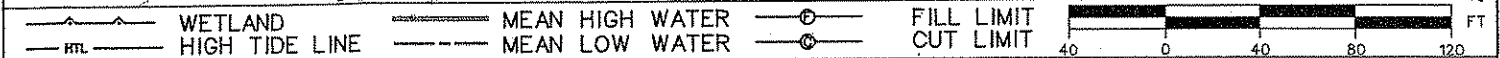
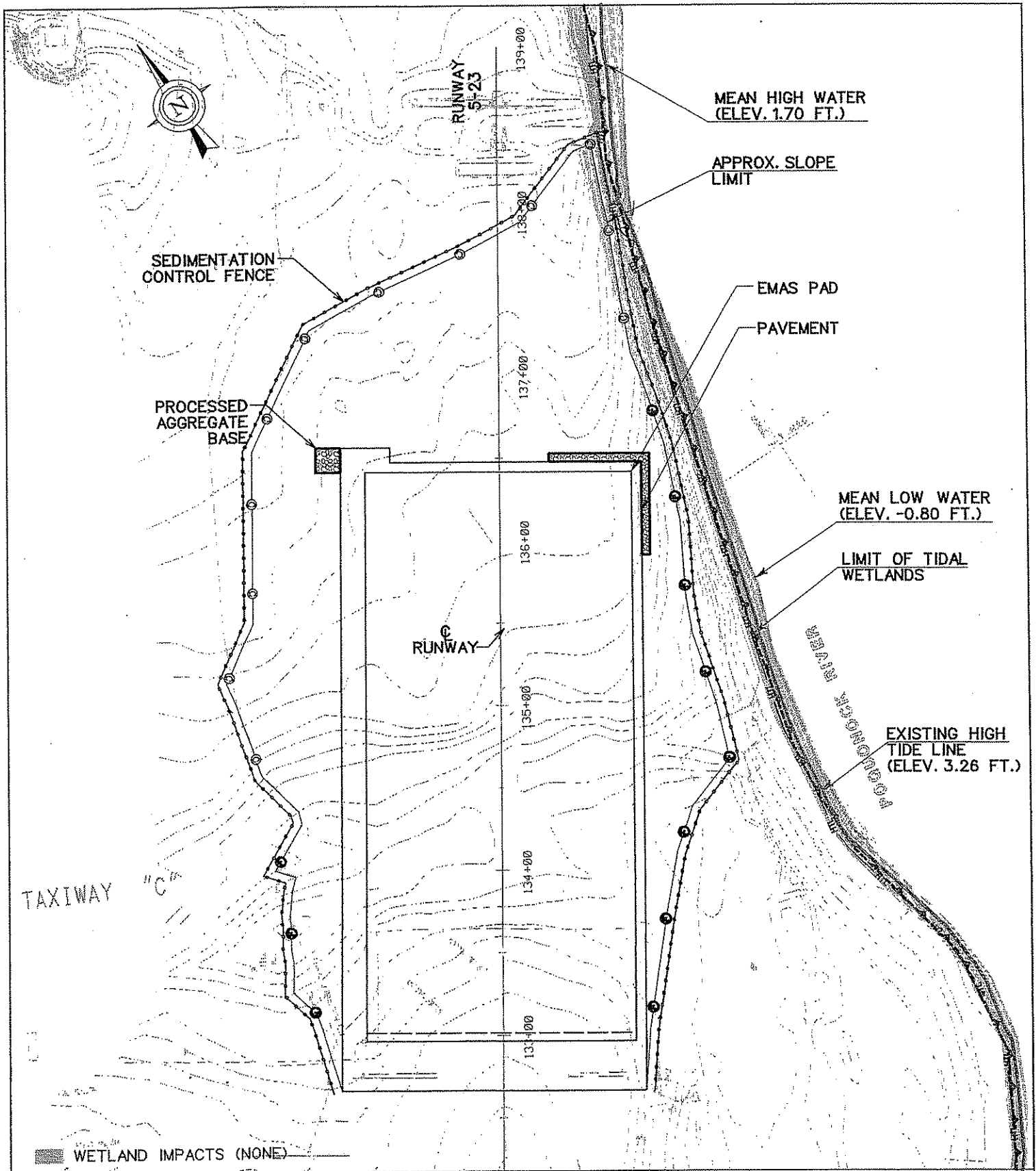
Connecticut Department of Transportation
GROTON - NEW LONDON AIRPORT
PROJECT 58 - 303

RUNWAY 5 - 23
SAFETY IMPROVEMENTS

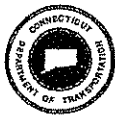
FIGURE 7

CROSS SECTION
OF IMPACT AREA
RUNWAY 5

DATE: 1/26/09



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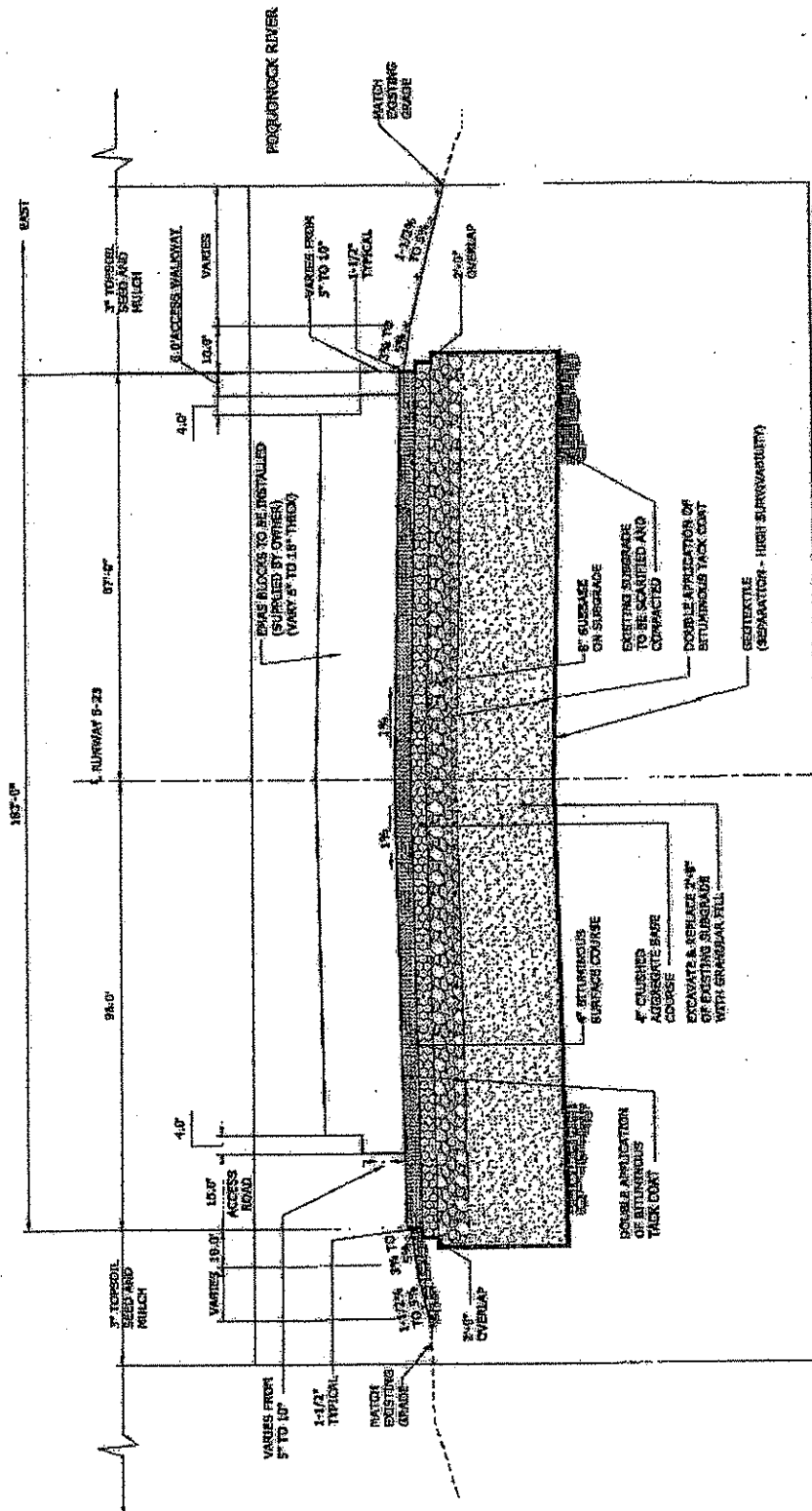
Connecticut Department of Transportation
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PROJECT 58 - 303

RUNWAY 5 - 23 SAFETY IMPROVEMENTS

FIGURE 8:

PLAN VIEW
RUNWAY 23

DATE: 1/21/09



TYPICAL SECTION - 5 APPROACH END (RUNWAY 23 DEPARTURE)
 SCALE: NOT TO SCALE

PREPARED FOR:



CONNECTICUT
 DEPARTMENT OF
 TRANSPORTATION

PREPARED BY:

PARSONS

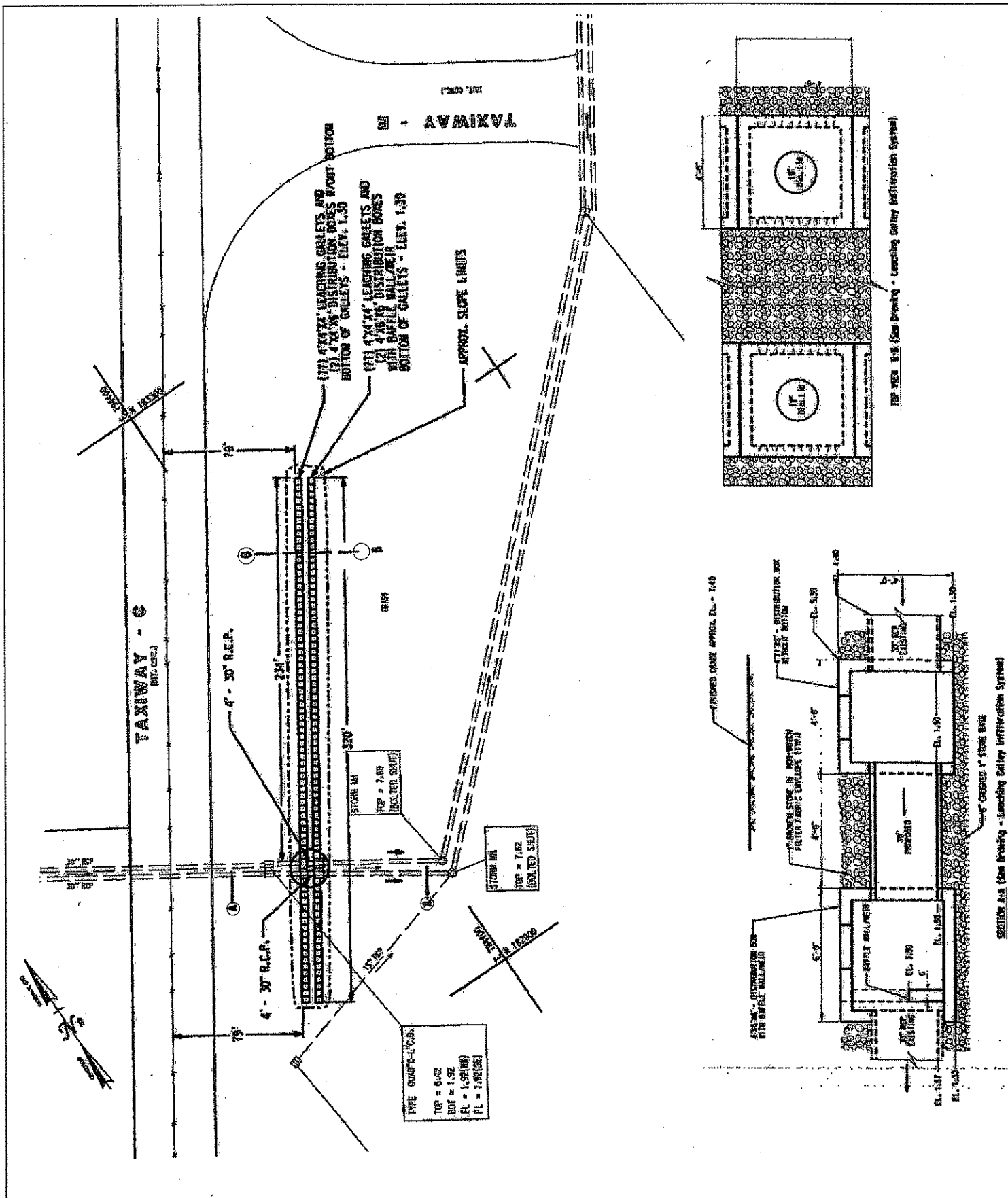
Connecticut Department of Transportation
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 PROJECT 58 - 303

RUNWAY 5 - 23 SAFETY IMPROVEMENTS

FIGURE 9:

TYPICAL EMAS
 SECTION
 RUNWAY 5

DATE: 1/21/09



CONNECTICUT
DEPARTMENT OF
TRANSPORTATION

PREPARED BY:

PARSONS

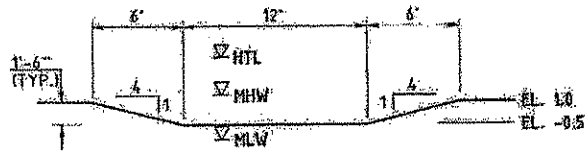
Connecticut Department of Transportation
GROTON - NEW LONDON AIRPORT
PROJECT 58 - 303

RUNWAY 5 - 23
SAFETY IMPROVEMENTS

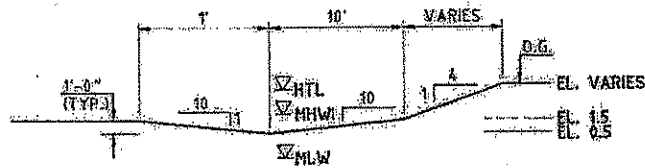
FIGURE 10

STORMWATER
LEACHING GALLEY
AT TAXIWAY C

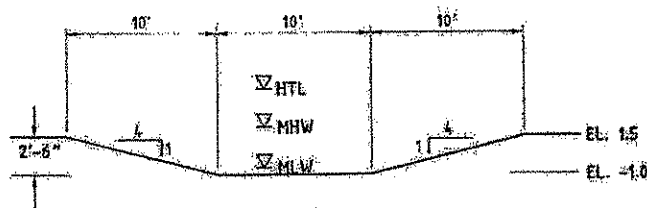
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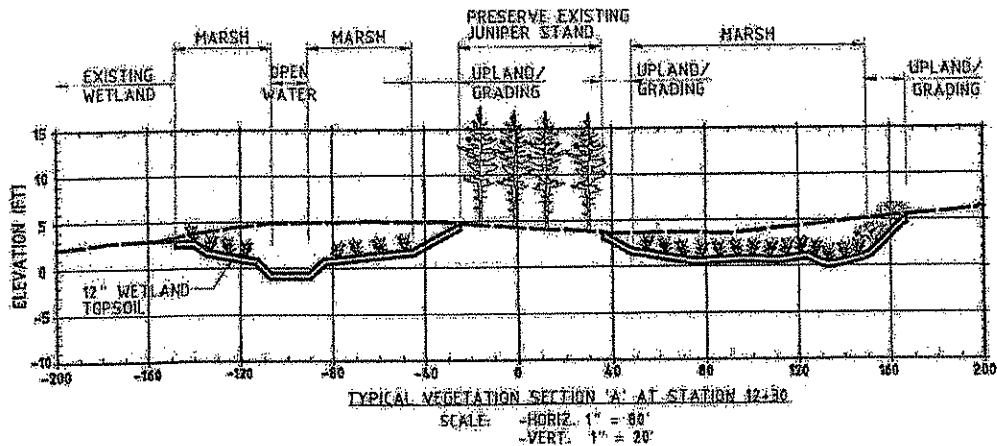
TYPICAL TIDAL DENDRITIC CHANNEL SECTION
N.T.S.



TYPICAL SHALLOW PERIMETER SWALE SECTION
N.T.S.



TYPICAL DEEP SALT PANNE SECTION
N.T.S.



PREPARED FOR:



CONNECTICUT
DEPARTMENT OF
TRANSPORTATION

PREPARED BY:

PARSONS

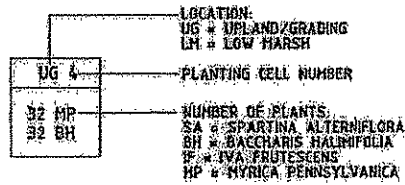
Connecticut Department of Transportation
GROTON - NEW LONDON AIRPORT
PROJECT 58 - 303





RUNWAY 5 - 23
SAFETY IMPROVEMENTS

FIGURE 12

WETLAND CREATION
GRADING DETAILS

DATE: 3/16/09




COVER TYPE CALCULATIONS AND KEY		AREA (ACRES)
	UPLAND/GRADING (ABOVE HTLI (ABOVE EL. 3.26))	0.148
	LOWER HIGH MARSH (CHARACTERISTIC SPECIES: SPARTINA PATENS) (FROM MEAN HIGH WATER EL. 1.7 TO HIGH TIDE LINE EL. 3.26)	0.664
	LOW MARSH (CHARACTERISTIC SPECIES: SPARTINA ALTERNIFLORA) (FROM EL. 0.0 TO MEAN HIGH WATER EL. 1.7)	1.56
	OPEN WATER/CHANNEL/MUDFLAT (BELOW EL. 0.0)	0.375
SUBTOTAL - TIDAL WETLAND		2.599
TOTAL PROPOSED MITIGATION AREA (EXCLUDING UPLAND PRESERVATION)		2.632

REPLANTING ZONE IN PHRAGMITES REMOVAL AREA.
 PHRAGMITES REMOVAL AREA = 0.45 AC.
 PLANTING ZONE = 0.17 AC.

SYMBOL	BOTANICAL NAME	COMMON NAME	TYPE	QUANTITY
WETLAND CREATION AREA				
SA	<i>Spartina alterniflora</i>	Smooth Cordgrass	Plug	300
BH	<i>Baccharis halimifolia</i>	Groundsel Tree	1 Gallon Container 12"-18" Height	192
F	<i>Iva frutescens</i>	High Tide Bush	1 Gallon Container 12"-18" Height	192
MP	<i>Myrica pennsylvanica</i>	Northern Bayberry	1 Gallon Container 12"-18" Height	192
PHRAGMITES REMOVAL AREA				
EP	<i>Spartina patens</i>	Saltmeadow Cordgrass	Plug	577

NOTE:
 ALL PLANTINGS WILL BE INSTALLED AT 5-FOOT ON-CENTER SPACING.

PREPARED FOR:

 CONNECTICUT
 DEPARTMENT OF
 TRANSPORTATION

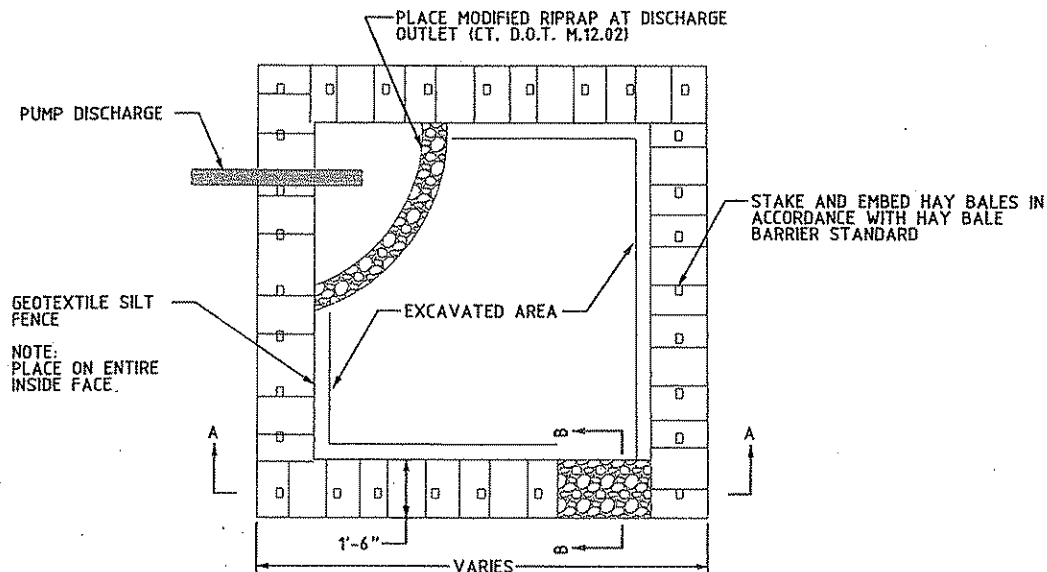
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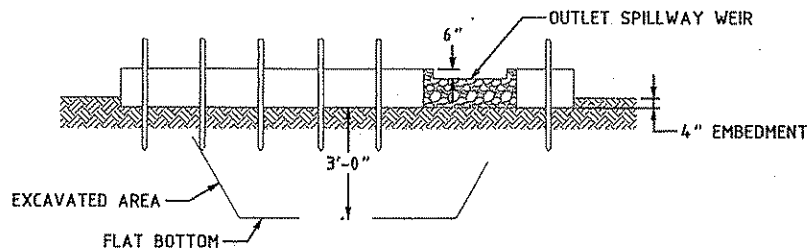
**RUNWAY 5 - 23
 SAFETY IMPROVEMENTS**

FIGURE 14
 WETLAND CREATION
 PLANTING KEY
 AND SCHEDULE

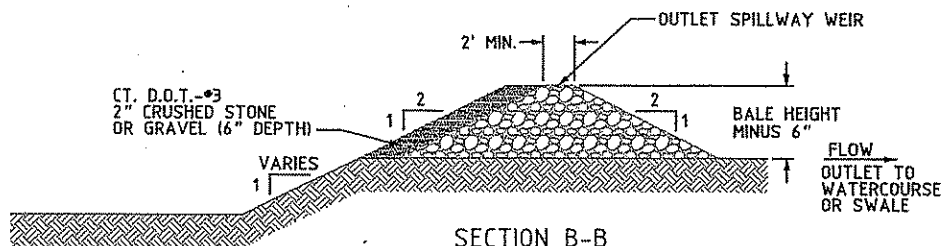
DATE: 3/13/09



PLAN
(NOT TO SCALE)

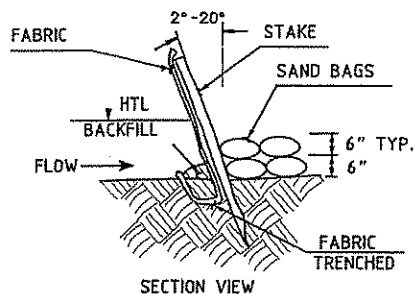


SECTION A-A
(NOT TO SCALE)



SECTION B-B
(NOT TO SCALE)

TYPE II DEWATERING SETTLING BASIN



SEDIMENTATION CONTROL SYSTEM
WITH SAND BAGS
N.T.S.

NOTES:

1. PROVIDE SAND BAGS BEHIND SILT FENCE WHERE THE GROUND ELEVATION IS BELOW THE HTL.
2. PLACE/STACK SAND BAGS BEHIND SILT FENCE SO THAT THE TOP OF THE SAND BAGS IS AT OR ABOVE THE HTL AS DIRECTED BY THE ENGINEER.

SOURCE: AECOM USA, INC.

PREPARED FOR:



CONNECTICUT
DEPARTMENT OF
TRANSPORTATION

PREPARED BY:

PARSONS

Connecticut Department of Transportation
GROTON - NEW LONDON AIRPORT
PROJECT 58 - 303

RUNWAY 5 - 23
SAFETY IMPROVEMENTS

FIGURE 15:

SEDIMENTATION
CONTROL DETAILS

DATE: 4/17/09